

Annual General Neeting 2022

K. M. K.

Shuqing Xiao Nanaging Director

Disclaimer

This presentation has been prepared by Energy Metals Limited ("Energy Metals or EME"). The information contained in this presentation is a professional opinion only and is given in good faith.

Certain information in this presentation has been derived from third parties and though Energy Metals has no reason to believe that it is not accurate, reliable or complete, it has not been independently audited or verified by Energy Metals.

Any forward looking statements included in this presentation involve subjective judgement and analysis and are subject to uncertainties, risks and contingencies, many of which are outside the control of, and maybe unknown to, Energy Metals. In particular they speak only to the date of this presentation, they assume the success of Energy Metals' strategies, and they are subject to significant regulatory, business, competitive and economic uncertainties and risks. Actual future events may vary materially from the forward looking statements and the assumptions on which these assumptions are based. Recipients of this presentation are cautioned not to place undue reliance on such forward looking statements.

Energy Metals makes no representation or warranty as to the accuracy, reliability or completeness of information in this document and does not take responsibility for updating any information or correcting any errors or omissions which may become apparent after this presentation is released.

To the extent permitted by law, Energy Metals and its officers, employees, related bodies corporate and agents disclaim all liability, direct, indirect or consequential (and whether or not arising out of the negligence, default or lack of care of Energy Metals and/or any of its agents) for any loss or damage suffered by a recipient or other persons arising out of, or in connection with, any use or reliance on this presentation or information.

Information in this presentation relating to exploration results, data and cut off grades is based on information compiled by Dr Wayne Taylor. Dr Taylor is a member of the AIG. Dr Taylor is a full time employee of Energy Metals. He has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves – The JORC Code (2012)". Dr Taylor consents to the inclusion of the information in the report in the form and context in which it appears.

All amounts in A\$ unless stated otherwise.



Australia's Uranium



EME Share Price vs U3O8 Price from 2010

EME Share Price Au\$

Uranium Price US\$/Ib U₃O₈





EME Capital Structure & Corporate Information

Issues shares & cash on hand

Shares on Issue	209.7M
Shareholders*	729
Cash & Bank (31 Dec 2021)	\$15.27M

* As at 11 April 2022

Major Shareholders

China Uranium Development Co.*	139.3M	66.45%
Ningbo Weisheng Dingxuan Equity	26.5M	12.66%
Jindalee Resources	11.2M	5.36%

* A subsidiary of CGN Uranium Resources Company Ltd

Directors & Management

- Mr Yusheng Cai (Non-Executive Chairman)
- Mr Shuqing Xiao (Managing Director)
- Mr Lindsay Dudfield (Non-Executive Director)
- Ms Jan Macpherson (Non-Executive Director)
- Mr Jun Zhou (Non-Executive Director)
- Mr Zhe Gao (Non-Executive Director)
- Mr Zhe Xu (Non-Executive Director)
- Ms Xuekun Li (Company Secretary)
- Dr Wayne Taylor (Exploration Manager)



Uranium Market Review – Uranium Price

Uranium spot price has entered the upward cycle while mine supply is still in the downward cycle





Uranium Market Review - Uranium Demand

Stable and strong demand from nuclear reactors

- Uranium consumption has returned to pre-2011 levels.
- More reactors to be built in Asia and the Middle East with 52 reactors under construction and more planned reactors.
- Uranium requirements expected to continue to grow. It is expected that China will approve 6-8 new reactors each year with 6 new reactors approved in April 2022.



CURRENTLY UNDER CONSTRUCTION





Uranium Market Review - Mine Supply

Uranium supply cycles lagged behind uranium price cycles

- The upward supply cycle continued to the year of 2012 since the Fukushima in 2011
- The change of supply cycle from the upward to downward happened in 2016.
- Now the supply is in the downward cycle, which is expected to continue.



Data source: World Nuclear Association

972 974 975 975 975 977 977 979 979 979 980 980

971

1968 1969 1970

US\$/lbs

110.00

100.00

90.00

80.00

70.00

60.00 50.00

40.00

30.00

20.00

10.00 0.00



Uranium Market Review - Mine Supply

Global Supply Cuts

Production curtailments have removed an estimated 77.6mlbs U_3O_8 from the market since 2014



Data source: Public information of uranium companies



Uranium Market Outlook

Discovering Clean Energy

Another uranium price upward cycle is approaching

- Uranium requirements will grows steadily with cumulative uncovered requirements of about 1.4 billion pounds to the end of 2035.
- Uranium supply is still in the downward cycle and it will continue.
- The upward uranium price is approaching as the current downward supply cycle continues with the certain increase in uranium requirements from nuclear reactors.

UTILITY UNCOVERED REQUIREMENTS



Source: UxC estimates - December 31, 2021



Strong Shareholder Support – CGN URC

Discovering Clean Energy

CGN Uranium Resources Co., Ltd (CGN-URC) is a wholly owned subsidiary of CGN, the largest nuclear utility in China





Northern Territory Projects



Discovering Clean Energy

NORTHERN TERRITORY PROJECTS



Northern Territory Projects – Bigrlyi JV

Bigrlyi Joint Venture (EME 72.39%, NTU 20.82% and Noble 6.79%)



- EME's flagship project is the sandstone-hosted Bigrlyi Uranium-Vanadium Deposit.
- A prefeasibility study was completed in 2011 with key parts being progressively updated.
- Development work was suspended in 2012.
- Recent work has significantly expanded the vanadium exploration target.
- EME's Bigrlyi Project well positioned to take advantage of recent positive sentiment in the uranium market and a return to spot prices near or above \$US50/lb U₃O₈.

Bigrlyi Mineral Resource Estimate at a 500ppm U₃O₈ cut-off (2011)

Resource Category	Tonnes (millions)	U ₃ O ₈ (ppm)	V₂O₅ (ppm)	U ₃ O ₈ (t)	V ₂ O ₅ (t)	U ₃ O ₈ (MIb)	V₂O₅ (MIb)
Indicated	4.7	1,366	1,303	6,360	6,060	14.0	13.4
Inferred	2.8	1,144	1,022	3,210	2,870	7.1	6.3
Total	7.5	1,283	1,197	9,570	8,930	21.1	19.7

Discovering Clean Energy Note: EME confirms that it is not aware of any new information or data that materially affects the above Bigrlyi Mineral Resource Estimate.



Bigrlyi Project: Potential for Resource Expansion

Past work has shown that the economics of the Bigrlyi project can be significantly improved by (a) an increase in the resource base, and (b) an increase in feed grade to the plant accompanying removal of acid-consuming gangue.

During the year, a review of the potential for resource expansion at depth was undertaken with positive results:

- Mineralisation is completely open at depths (>300m) below modelled pit shells and down-plunge of existing ore bodies.
- Limited previous deep drilling encountered some high grade intercepts particularly at A4 including: 21m at 1,392 ppm U3O8 in hole BRD11166 at 352m vertical depth and 4m at 6,662 ppm U3O8 in hole BRD11051 at 458m vertical depth.





Bigrlyi Project: Potential for Resource Expansion

At the A2 ore body potential has been identified for resource expansion to maximum open-pittable depths beneath existing high-grade intercepts.







Bigrlyi Project: Potential for Resource Expansion

A15 ore body expansion to east – significant radiometric anomalies lie outside the existing pit shell !





Bigrlyi Project: Potential to Improve Project Economics

Metallurgical test-work aimed at increasing feed grade to the processing plant and rejecting acid-consuming gangue (carbonate) is in progress.

- Study Includes investigation of new ore-sorting technologies (optical & XRT sorting) with encouraging results previously obtained for sandstone uranium ores by other companies.
- Test-work due to commence at ANSTO on a floatation method to remove carbonate.





Ngalia Regional Projects

- Twelve Uranium exploration targets have been identified & await drill-testing
- Rare-Earth Element Potential identified at the Crystal Creek prospect



Significant potential to increase the overall U_3O_8 resource base in proximity to Bigrlyi and Walbiri – Walbiri South and Walbiri Anticline are the Priority Targets. • Walbiri South/Anticline*

- Penrynth *
- Carnotite Hill *
- Autobahn *
- Dingos Rest South *
- Cappers area palaeochannels (off map to the east)
- Patmungala *
- Dingos Rest North *
- Yuendumu Thrust West
- Crystal Creek
- Coonega
- Rankins

Note * = sacred site clearances in place



Ngalia Regional Projects

Walbiri South & Anticline targets – target beds traced around folded strata



Crystal Creek REE Project

- Significant REE-in-soil anomalies (La + Ce >140ppm) associated with ironstone dykes and quartz blows identified - open in three directions.
- Historical drilling found up to 1,100 ppm La and 200 ppm Y over 1 metre intervals.
- Anomalous Nd (229 ppm) identified in a drill-hole into clay-altered granite

 possible IAC (ion-adsorption on clay) style.



Gridded La+Ce in soil samples. Green dashed lines are magnetic lineaments; pink dashed lines are quartz blows; white dots are REE-anomalous rock-chip and drill-hole sample locations





Northern Territory Projects:

- Bigrlyi Project focus.
- Field work and site visits have resumed.
- Preparation underway for revision of the Bigrlyi mineral resource estimate.
- Ore beneficiation and carbonate gangue rejection metallurgical studies in progress.
- Drill program planning to test Ngalia Regional exploration targets.
- Sampling program this season at new Crystal Creek Rare-Earths Project.

WA Projects:

• Minimum exploration expenditure to maintain tenements in good standing.







ASX-EME

Thank you !

For more information: Phone: +61-8-9322-6904 Email: enquiry@energymetals.net Web: <u>www.energymetals.net</u>

Competent Persons' Statement

The information in this report relating to mineral resource estimates for the Bigrlyi Deposit is based on information compiled by Arnold van der Heyden BSc, who is a Member of The Australasian Institute of Mining and Metallurgy (MAusIMM). Mr van der Heyden has more than five years relevant experience in estimation of mineral resources and the mineral commodity uranium. Mr van der Heyden is a full time employee of Helman & Schofield and takes responsibility for the resource estimation. Mr van der Heyden has sufficient experience relevant to the assessment of this style of mineralisation to qualify as a Competent Person as defined in the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves – The JORC Code (2004)". Mr van der Heyden consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.

The Mineral Resource estimate for the Bigrlyi Deposit was originally compiled and announced utilising parameters from the 2004 JORC Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. This information was prepared and first disclosed to the ASX on 28 June 2011 under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

Information in this presentation relating to exploration results, data and cut-off grades is based on information compiled by Dr Wayne Taylor, MAIG. Dr Taylor is a full time employee of Energy Metals. Dr Taylor has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves – The JORC Code (2012)". Dr Taylor consents to the inclusion of the information in the report in the form and context in which it appears.

